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CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			HUSON, MONICA ANNE	
			ART UNIT	PAPER NUMBER
			1732	
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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/648,540

Applicant(s)

DONG ET AL.

Examiner

Monica A. Huson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

This office action is in response to the paper filed 19 December 2005.

The rejections previously made under 35 USC 102 have been overcome by applicant's arguments, however, rejections under 35 USC 103 have been made below.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato's Injection Molding Handbook (3<sup>rd</sup> ed.). Regarding Claim 1, Rosato shows that it is known to carry out a method of molding an article, comprising injection molding a polymeric material at a melt temperature of about 330 to 370°C (Table 4-8, PEEK) into a mold having a mold temperature of about 90 to about 130°C (Table 4-8, PEEK; It is being interpreted that 160°C meets "about 130°C".) and a clamp tonnage of about 12 to about 35 tons to form the article (Page 77-78, Kurto/John Manufacturer). Rosato does not specifically show using his specific clamp tonnage in combination with the melt and mold temperature parameters. However, it is believed that one of ordinary skill in the art would recognize clamp tonnage as a result-effective variable. Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to choose a clamp tonnage such as Rosato

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discloses with his other process parameters as part of routine experimentation in order to fine tune a molding process. See MPEP 2144.05 (II)(B)

Regarding Claim 4, Rosato shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the melt temperature is of about 340 to about 360°C (Figure 4-8), meeting applicant's claim.

Regarding Claim 5, Rosato shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the mold temperature is of about 100 to about 120°C (Figure 4-8), meeting applicant's claim.

Regarding Claim 6, Rosato shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the clamp tonnage is of about 15 to about 30 tons (Page 77-78), meeting applicant's claim.

Claims 2, 3, 15, 16, 18-21, 24, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato, in view of Toshihiko et al. (JP 10-306268).

Regarding Claim 2, Rosato shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show a radial tilt change. Toshihiko et al., hereafter "Toshihiko," show that it is known to carry out a method wherein a disk assembly fabricated from the disk exhibits a radial tilt change value after 96 hours at 80°C of less than or equal to about 0.35 degree (Para. 0008; It is noted that the phrase "measured at a radius of 55 millimeters" is seen as only indicating the radius of the disk, which does not have a manipulative effect on the stepwise limitations of the method claim.). Toshihiko and Rosato are combinable because they are concerned with a similar technical field, namely, methods of injection molding articles. It would

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have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt change value as a parameter of Rosato's molding process in order to accurately form an article that must meet strict end-use specifications.

Regarding Claim 3, Rosato shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show a radial tilt change. Toshihiko shows that it is known to carry out a method wherein a disk assembly fabricated from the disk exhibits a radial tilt change value after 96 hours at 80°C of less than or equal to about 0.15 degree (Para. 0008; It is noted that the phrase "measured at a radius of 55 millimeters" is seen as only indicating the radius of the disk, which does not have a manipulative effect on the stepwise limitations of the method claim.). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt change value as a parameter of Rosato's molding process in order to accurately form an article that must meet strict end-use specifications.

Regarding Claim 4, Rosato shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not specifically show forming a data storage disk. Toshihiko shows that it is known to form a data storage disk from the molding process (Para 0002). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to form Toshihiko's data storage disk with Rosato's molding method in order to most efficiently form the desired article.

Regarding Claim 5, Rosato shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not specifically show forming a laminate data storage assembly. Toshihiko shows that it is known to form a laminate data storage assembly from the molding

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process (Para 0004). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to form Toshihiko's data storage disk with Rosato's molding method in order to most efficiently form the desired article.

Regarding Claim 18, Rosato shows that it is known to carry out a method of molding an article comprising injection molding a polymeric material to form articles according to a molding model comprising molding parameters and molding parameter values (Page 78, 179, 180, , 260, 261). He does not show a radial tilt change. Toshihiko shows that it is known to carry out a method including testing disk assemblies fabricated from the disks for radial tilt change, creating an updated molding model based on the molding parameter values that resulted in disk assemblies fabricated from the disks having a radial tilt change within a selected range of values; and repeating the molding, testing, and creating steps to form final disks and a final molding model, wherein disk assemblies fabricated from the final disks exhibit a radial tilt change value after aging of less than or equal to about 0.35 degree (Para 0008; It is noted that Toshihiko's "repeated research" would comprise the claimed steps.). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt change value as a guiding variable of Rosato's molding process in order to accurately form an article that must meet strict end-use specifications.

Regarding Claim 19, Rosato shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not show aging his molded articles. Toshihiko shows that it is known to carry out a process wherein the testing comprises aging the disk assemblies at 80°C for 96 hours (Para 0008). It would have been prima facie obvious to one of ordinary skill in the art

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at the time the invention was made to age Rosato's molded articles for a time according to Toshihiko in order to most effectively gather data with regard to the experimental variable.

Regarding Claim 20, Rosato shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not show a radial tilt change. Toshihiko shows that it is known to carry out a method wherein a disk assembly fabricated from the disk exhibits a radial tilt change value after 96 hours at 80°C of less than or equal to about 0.35 degree (Para. 0008; It is noted that the phrase "measured at a radius of 55 millimeters" is seen as only indicating the radius of the disk, which does not have a manipulative effect on the stepwise limitations of the method claim.). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt change value as a parameter of Rosato's molding process in order to accurately form an article that must meet strict end-use specifications.

Regarding Claim 21, Rosato shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not show a radial tilt change. Toshihiko shows that it is known to carry out a method wherein a disk assembly fabricated from the disk exhibits a radial tilt change value after 96 hours at 80°C of less than or equal to about 0.15 degree (Para. 0008; It is noted that the phrase "measured at a radius of 55 millimeters" is seen as only indicating the radius of the disk, which does not have a manipulative effect on the stepwise limitations of the method claim.). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Toshihiko's radial tilt change value as a parameter of Rosato's molding process in order to accurately form an article that must meet strict end-use specifications.

Regarding Claim 24, Rosato shows the process as claimed as discussed in the rejection of Claim 18 above, including a method wherein the molding parameters are melt temperature, mold temperature, clamp tonnage, hold pressure, cool time (Pages 60, 78, 179, 180, 260, 261, 283), meeting applicant's claim.

Regarding Claim 31, Rosato shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not specifically show forming a data storage disk. Toshihiko shows that it is known to form a data storage disk from the molding process (Para 0002). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to form Toshihiko's data storage disk with Rosato's molding method in order to most efficiently form the desired article.

Regarding Claim 32, Rosato shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not specifically show forming a laminate data storage assembly. Toshihiko shows that it is known to form a laminate data storage assembly from the molding process (Para 0004). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to form Toshihiko's data storage disk with Rosato's molding method in order to most efficiently form the desired article.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato, in view of Dhar et al. (U.S. Patent 6,221,536).

Regarding Claim 7, Rosato shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show specific percent feature replication. Dhar et al., hereafter "Dhar," show that it is known to carry out a method wherein the disk exhibits a percent feature



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replication of greater than or equal to about 90 percent (Column 14, lines 1-4). Dhar and Rosato are combinable because they are concerned with a similar technical field, namely, methods of molding polymeric articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to follow Dhar's feature replication percentage as a result of Rosato's molding process in order to make a valuable product that accurately represents features from the mold surface.

Regarding Claim 8, Rosato shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show specific percent feature replication. Dhar shows that it is known to carry out a method wherein the disk exhibits a percent feature replication of greater than or equal to about 95 percent (Column 14, lines 1-4). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to follow Dhar's feature replication percentage as a result of Rosato's molding process in order to make a valuable product that accurately represents features from the mold surface.

Claims 9, 10, and 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato, in view of Adedji et al. (US PGPub 2002/0137840).

Regarding Claim 9, Rosato shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show using a specific polymer. Adedji et al., hereafter "Adedji," show that it is known to carry out a method wherein the polymeric material comprises polyarylene ether and polyalkenyl aromatic (Abstract). Adedji and Rosato are combinable because they are concerned with a similar technical field, namely, methods of molding polymeric articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the

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invention was made to use Adedji's specific polymer in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Regarding Claim 10, Rosato shows the process as claimed as discussed in the rejection of Claim 9 above, but he does not show using a specific polymeric structure. Adedji shows that it is known to carry out a method wherein the polyarylene ether comprises the claimed structure (see claim listing) (Paragraphs 0015-0016). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Adedji's specific polymeric structure in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Regarding Claim 14, Rosato shows the process as claimed as discussed in the rejection of Claim 9 above, but he does not show a specific molding composition. Adedeji shows that it is known to carry out a method wherein the polyarylene ether is present in the polymeric material in an amount of about 40 percent by weight and the polyalkenyl aromatic is present in the polymeric material in amount of about 60 percent by weight based on the total weight of the polyarylene ether and the polyalkenyl aromatic (Para 0014). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Adedeji's specific polymer in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato and Singh, further in view of Fortuyn et al. (U.S. Patent 6,306,953). Rosato shows the process as claimed as discussed in the rejection of Claim 9 above, but he does not show using a polymer

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with a specific viscosity. Fortuyn et al., hereafter "Fortuyn," show that it is known to carry out a method wherein the polyarylene ether has an intrinsic viscosity of about 0.10 to about 0.60 deciliters per gram as measured in chloroform at 25°C (Column 2, lines 41-43). Fortuyn and Rosato are combinable because they are concerned with a similar technical field, namely, methods of molding polymeric articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use a material with Fortuyn's viscosity in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato and Singh, further in view of Allen (U.S. Patent 4,727,093). Rosato shows the process as claimed as discussed in the rejection of Claim 9 above, but he does not show a specific polyalkenyl aromatic. Allen shows that it is known to carry out a process wherein the polyalkenyl aromatic contains at least 25% by weight of the claimed structural units (see claim listing) (Column 4, lines 3-23). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Allen's specific polymeric structure in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato and Singh, further in view of Cheung et al. (U.S. Patent 5,872,201). Rosato shows the process as claimed as discussed in the rejection of Claim 9 above, but he does not show a specific

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polyalkenyl aromatic. Cheung et al., hereafter "Cheung," show that it is known to carry out a method wherein the polyalkenyl aromatic is atactic crystal polystyrene (Column 7, lines 37-38). Cheung and Rosato are combinable because they are concerned with a similar technical field, namely, methods of molding polymeric articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Cheung's specific polymer in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato, in view of Karasz et al. (U.S. Patent 5,286,812). Rosato shows that it is known to carry out a method of molding an article, comprising injection molding a polymeric material at a melt temperature of about 330 to 370°C (Table 4-8) into a mold having a mold temperature of about 90 to about 130°C (Table 4-8) and a clamp tonnage of about 12 to about 35 tons to form the article (Page 77-78). Rosato does not show a specific molding material. Karasz et al., hereafter "Karasz," show that it is known to carry out a method wherein the polymeric material comprises poly(2,6-dimethyl-1,4-phenylene oxide) and polystyrene (Column 1, lines 59-65). Karasz and Rosato are combinable because they are concerned with a similar technical field, namely, methods of molding polymeric articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Karasz's specific material in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain material.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato and Toshihiko, further in view of Ohkawa et al. (U.S. Patent 5,525,645). Rosato shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not show testing the articles for percent feature replication. Ohkawa et al., hereafter "Ohkawa," show that it is known to carry out a method comprising testing the disks for percent feature replication; creating an updated molding model based on the mold parameter values that resulted in disks exhibiting a percent feature replication within a selected range of values; and repeating the molding, testing, and creating steps until the final disks exhibit a percent feature replication of greater than or equal to about 90 percent (Column 12, lines 66-67; Column 13, lines 1-11, 45-67; Column 14, lines 1-2). Ohkawa and Rosato are combinable because they are concerned with a similar technical field, namely, methods of molding polymeric articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to follow Ohkawa's testing procedures with Rosato's molding process in order to insure the quality of the molded articles.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato, Toshihiko and Ohkawa, further in view of Dhar. Rosato shows the process as claimed as discussed in the rejection of Claim 22 above, but he does not show specific percent feature replication. Dhar shows that it is known to carry out a method wherein the disk exhibits a percent feature replication of greater than or equal to about 95 percent (Column 14, lines 1-4). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention

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was made to follow Dhar's feature replication percentage as a result of Rosato's molding process in order to make a valuable product that accurately represents features from the mold surface.

Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato and Toshihiko, further in view of Singh.

Regarding Claims 25 and 26, Rosato shows the process as claimed as discussed in the rejection of Claim 18 above, but he does not show using a specific polymer. Singh shows that it is known to carry out a method wherein the polymeric material comprises polyarylene ether (Column 3, lines 5-6). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Singh's specific polymer in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Regarding Claim 27, Rosato shows the process as claimed as discussed in the rejection of Claim 26 above, but he does not show using a specific polymeric structure. Singh shows that it is known to carry out a method wherein the polyarylene ether comprises the claimed structure (see claim listing) (Column 3, lines 5-27). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Singh's specific polymeric structure in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato, Toshihiko, and Singh, further in view of Fortuyn. Rosato shows the process as claimed as

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discussed in the rejection of Claim 26 above, but he does not show using a polymer with a specific viscosity. Fortuyn shows that it is known to carry out a method wherein the polyarylene ether has an intrinsic viscosity of about 0.10 to about 0.60 deciliters per gram as measured in chloroform at 25°C (Column 2, lines 41-43). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use a material with Fortuyn's viscosity in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato, Toshihiko, and Singh, further in view of Allen. Rosato shows the process as claimed as discussed in the rejection of Claim 26 above, but he does not show a specific polyalkenyl aromatic. Allen shows that it is known to carry out a process wherein the polyalkenyl aromatic contains at least 25% by weight of the claimed structural units (see claim listing) (Column 4, lines 3-23). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Allen's specific polymeric structure in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosato, Toshihiko, and Singh, further in view of Adedeji. Rosato shows the process as claimed as discussed in the rejection of Claim 9 above, but he does not show a specific molding composition. Adedeji shows that it is known to carry out a method wherein the polyarylene

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ether is present in the polymeric material in an amount of about 40 percent by weight and the polyalkenyl aromatic is present in the polymeric material in amount of about 60 percent by weight based on the total weight of the polyarylene ether and the polyalkenyl aromatic (Para 0014). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Adedeji's specific polymer in Rosato's molding process in order to obtain an article that meets exclusive end-use specifications characteristic of the certain polymer.

### ***Response to Arguments***

Applicant's arguments, see the paper filed 19 December 2005, with respect to the rejection(s) of claim(s) 1 and 4-6 under 35 USC 102 (Rosato) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Rosato (under 35 USC 103).

Applicant's arguments, see the paper filed 19 December 2005, with respect to the rejection(s) of claim(s) 9 and 10 under Singh have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Rosato and Adedji.

With regard to claims 2, 3, and 7, 8, and 11-32, applicant's arguments filed 19 December 2005 have been fully considered but they are not persuasive.

Applicant contends that Toshihiko does not show the invention because he does not show a multistep method to insure production of articles with low radial tilt. This is not persuasive because it is maintained that Toshihiko's "repeated research" would include multistep processes,



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e.g. creating an updated molding model based on molding parameter values. Further, applicant contends that Toshihiko does not show the instant invention because he does not show specific melt temperature or mold temperature. This is not persuasive because Toshihiko was not cited to teach specific process conditions.

Applicant contends that Dhar does not show the instant invention because he does not show molding disks. This is not persuasive because Dhar was not cited to show molding disks. Dhar was cited to show a specific replication element, and it is maintained that Dhar does show this element in his planar recording-medium article.

Applicant contends that Fortuyn does not show the instant invention because he does not show molding disks or clamp tonnage. This is not persuasive because Fortuyn was not cited to show this element of the claimed invention.

Applicant contends that Allen does not show the instant invention because he does not show molding disks or clamp tonnage. This is not persuasive because Allen was not cited to show this element of the claimed invention.

Applicant contends that Cheung does not show the instant invention because he does not show molding disks or specific injection molding parameters. This is not persuasive because Cheung was not cited to show this element of the claimed invention.

Applicant contends that Adedji does not show the instant invention (claim 14) because he does not show molding disks. This is not persuasive because Adedji was not cited to show this element of the claimed invention.

Applicant contends that Karasz does not show the instant invention because he does not show the particular molding parameter combination, e.g. melt temperature, mold temperature,

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clamp tonnage. This is not persuasive because Karasz was not cited to show this element of the claimed invention.

Applicant contends that Ohkawa does not show the instant invention because he does not show injection molding or radial tilt of a disk. This is not persuasive because Ohkawa was not cited to show this element of the claimed invention.

Applicant contends that claims 23 and 25-30 are patentable for reasons discussed above, relative to the specific references that were applied to each claim.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with regard to polyarylene ether compounds in general:

U.S. Patent 6,919,399 to Adedji et al.

U.S. Patent 6,545,080 to Adedji et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Monica A Huson  
February 23, 2006



**MICHAEL P. COLAIANNI**  
**SUPERVISORY PATENT EXAMINER**